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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,820	11/04/2003	Sung Uk Moon	244927US90	4464

22850 7590 03/22/2007
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
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EXAMINER

DEAN, RAYMOND S

ART UNIT PAPER NUMBER

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/22/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/22/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/699,820	Applicant(s) MOON ET AL.	
	Examiner Raymond S. Dean	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 03 January 2007.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1 and 4-13 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1 and 4-13 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 November 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed January 3, 2007 have been fully considered but they are not persuasive.

Examiner respectfully disagrees with Applicants' assertion on Page 8, 3rd Paragraph "Therefore, Trossen fails to teach or disclose the reception ability value collector ...". The SNR that is measured in Trossen is converted to a corresponding maximum data rate that can be supported or received by the mobile, which is a reception ability value (See Col. 5 lines 20 – 43). The node, which is the reception ability value collector, stores the data rates in order to determine which modulation coding rate, which is a transmission method, to invoke (See Col. 5 lines 31 – 38). Trossen further teaches the scenario wherein the node collects the data rate that each mobile in the multicast group can support (See Col. 6 lines 4 – 24). Trossen further teaches a system in which each of the mobiles reliably receive data. The mobiles can different data rates that said mobiles can support thus there can be a scenario in which there will be a mobile which can support the lowest data rate (See Col. 7 lines 60 – 62).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4 – 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Trossen et al. (US 7,054,643).

Regarding Claim 1, Trossen teaches a radio communication system for performing multicast communication comprising: a reception ability value collector configured to collect a reception ability value of each mobile station belonging to a specific multicast group (Cols: 3 lines 35 – 39, 4 lines 6 – 11, 5 lines 20 – 43, 6 lines 4 – 24, Table 1, See Response To Arguments Above); a transmission method determiner configured to determine a transmission method of transmitting information in accordance with the collected reception ability value (Col. 5 lines 38 – 39, modulation-coding schemes); a transmitter configured to transmit the information to each mobile station using the determined transmission method (Figures 1, 2); and a radio resource manager configured to manage available radio resources (Col. 6 lines 16 – 20, efficiently managing the frequency spectrum, which is a radio resource), wherein the transmission method determiner determines the transmission method in accordance with the reception ability value and the available radio resources, so that a mobile station equipped with a lowest reception ability can receive the information using the determined transmission method (Cols. 5 lines 20 – 43, 6 lines 4 – 24, 7 lines 60 – 67, 8 lines 1 – 13, See Response To Arguments Above).

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Regarding Claim 4, Trossen teaches a radio station comprising: a reception ability value collector configured to collect a reception ability value of each mobile station belonging to a specific multicast group (Figure 5, Cols: 3 lines 35 – 39, 4 lines 6 – 11, 5 lines 20 – 43, 6 lines 4 – 24, 10 lines 1 – 4, Table 1, See Response To Arguments Above); a transmission method determiner configured to determine a transmission method of transmitting information in accordance with the collected reception ability value (Col. 5 lines 38 – 39, modulation-coding schemes); a transmitter configured to transmit the information to each mobile station using the determined transmission method (Figures 1, 2); and a radio resource manager configured to manage available radio resources (Col. 6 lines 16 – 20, efficiently managing the frequency spectrum, which is a radio resource), wherein the transmission method determiner determines the transmission method in accordance with the reception ability value and the available radio resources, so that a mobile station equipped with a lowest reception ability can receive the information using the determined transmission method (Cols. 5 lines 20 – 43, 6 lines 4 – 24, 7 lines 60 – 67, 8 lines 1 – 13, See Response To Arguments Above).

Regarding Claims 5, 8, 9, 12 Trossen teaches all of the claimed limitations recited in Claims 4, 6, 1. Trossen further teaches wherein the reception ability value is defined by at least one of a demodulation method, a reception buffer size, a computing processing ability, an error correction method and an interleaving length (Col. 5 lines 24 – 27, computing processing capability to process the transmitted data rate).

Regarding Claims 6, 10, 11, Trossen teaches all of the claimed limitations recited in Claims 4, 6, 7. Trossen further teaches wherein the transmission method is determined by at least one of a modulation method, transmission power, a method of organizing the information hierarchically, the amount of data, the numbers of codes, an error correction method, the numbers of blocks, an interleaving length and a rate matching method (Col. 5 lines 38 – 39, modulation-coding schemes).

Regarding Claims 7, 13, Trossen teaches all of the claimed limitations recited in Claims 4, 1. Trossen further teaches wherein the radio resource is defined by at least one of transmission power, the numbers of codes, the numbers of frequencies and propagation conditions (Col. 6 lines 16 – 20, efficiently managing the frequency spectrum which comprises the number of frequencies).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S. Dean whose telephone number is 571-272-7877. The examiner can normally be reached on Monday-Friday 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Raymond S. Dean
March 16, 2007


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
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